Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:
Automatic Identification System (AIS)

1.2. Summary description of the data:
The Automatic Identification System (AIS) is an automatic tracking system used on ships and by vessel traffic services (VTS) for identifying and locating vessels by electronically exchanging data with other nearby ships, AIS base stations, and satellites.

The AIS database contains Automatic Identification System (AIS) data from the east coast of the U.S. for November 2008 to the present. The data is acquired by the VOLPE National Transportation Systems Center from the U.S. Coast Guard's Nationwide Automatic Identification System (NAIS) network and is currently being used by NOAA Fisheries' Office of Protected Resources (OPR) to conduct a variety analyses in support of large whale conservation. The database is stored on a server at VOLPE, administered and managed by OPR, and not accessible to the public.

On a monthly basis, raw data from the NAIS feed is decoded into a CSV text file by VOLPE using their TV32 software. A custom PL/SQL import function is then used by OPR to import the data from the CSV text file into the PostgreSQL/PostGIS database.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:
2008 to Present

1.5. Actual or planned geographic coverage of the data:
W: -180, E: 180, N: 90, S: -90

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy,

research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)
Instrument: Radio Antenna
Platform: Ships
Physical Collection / Fishing Gear: Not Applicable

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
Jeff D Adams

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NMFS Office Of Protected Resources

2.4. E-mail address:
jeff.adams@noaa.gov

2.5. Phone number:
301-427-8434

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:
Jeff D Adams

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?
Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):
Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:
On a monthly basis, raw data from the NAIS feed is decoded into a CSV text file by VOLPE using their TV32 software. A custom PL/SQL import function is then used by OPR to import the data from the CSV text file into the PostgreSQL/PostGIS database.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

The U.S. Coast Guard is responsible for the quality of the data contained in the NAIS data feed. We perform additional quality control when performing analysis.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://inport.nmfs.noaa.gov/inport/item/29614

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is

explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

No

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

No

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

Data is unclassified and publicly accessible. However, NMFS OPR is not the source of the data contain in the database. The data reside at the VOLPE Data Center at the Department of Transportation. OPR NMFS remotely access the data using a PostgreSQL client for analysis.

7.2. Name of organization of facility providing data access:

NMFS Office Of Protected Resources

7.2.1. If data hosting service is needed, please indicate:

Not Applicable

7.2.2. URL of data access service, if known:

http://www.uscg.mil/acquisition/nais/

7.3. Data access methods or services offered:

On a monthly basis, raw data from the NAIS feed is decoded into a CSV text file by VOLPE using their TV32 software. A custom PL/SQL import function is then used by OPR to import the data from the CSV text file into the PostgreSQL/PostGIS database.

Data is imported into two tables. One table stores vessel information and the other stores the position, speed, and navigational status data. The table that stores vessel information is named vessels and contains the following fields: id (unique ID), name (vessel's name), mmsi (vessel's Maritime Mobile Service Identity number), imo (vessel's International Maritime Organization number), callsign (vessel's call sign), type (vessel's type) and loa (vessel's overall length).

The table that stores the position, speed, and navigational status data is named us_ec and is partitioned into many child tables by year and month. The partitioned child tables are named using the following convention: us_ec_YYYYMM (e.g. us_ec_200811, us_ec_200812, us_ec_200901, etc.). Each partitioned table contains the following fields: id (unique ID), vessels_id (foreign key to the vessels table), sog (vessel's speed over ground), cog (vessel's course over ground), hdg (vessel's heading), epoch (time at which),

the_geom (vessel's position).

7.4. Approximate delay between data collection and dissemination:
30 Days

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)
Other

8.1.1. If World Data Center or Other, specify:
VOLPE Data Center

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
NMFS Office Of Protected Resources - Silver Springs, MD

8.3. Approximate delay between data collection and submission to an archive facility:
Not Applicable

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection
The Department of Transportation, VOLPE Data Center establishes procedures and policies required for the recovery and restoration of data destroyed or loss.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.